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manufacturer information item is updated by analyzing the content of the manufacturer information item corresponding to the modified content to determine whether the manufacturer information item for the manufacturer is effective to perform the recording, the modification, and/or reproduction.

REMARKS

INTRODUCTION:

In accordance with the foregoing, claims 4, 5, 7-10, 15, 16, 26-28, 31, 32, 34, and 39, have been amended and claims 40-46 have been added. No new matter is being presented, and approval and entry are respectfully requested.

Claims 4-10 and 15-46 are pending and under consideration.

REJECTION UNDER DOUBLE PATENTING:

In the Office Action, at page 2, claims 4-5, 7-10, 15-23, 28, and 31-38 were rejected under the judicially created doctrine of provisional obviousness-type double patenting as being unpatentable over claims 1-2, 15-17, 20-21, 24-25, and 27 of copending application No. 09/337,253, parent application of the above-referenced application. Further, claims 6, 24-27, 29-30, and 39 were rejected under the judicially created doctrine of provisional obviousness-type double patenting as being unpatentable over claims 1-2, 15-17, 20-21, 24-25, and 27 of copending application No. 09/337,253 in view of U.S. Patent No. 5,758,355 to Buchanan. Claims 4-10 and 15-39 were rejected under the judicially created doctrine of provisional obviousness-type double patenting as being unpatentable over claims 11-38 of copending application No. 9/610,696, divisional application of the above-referenced application. Applicants will address the provisional obviousness-type double patenting rejections once the pending rejections to the claims are resolved.

REJECTION UNDER 35 U.S.C. § 102:

In the Office Action, at page 11, claims 4-10 and 16-30 were rejected under 35 U.S.C. § 102 in view of U.S. Patent No. 6,038,366 to Ohno et al. ("Ohno"). This rejection is traversed and reconsideration is requested.

In essence, although Ohno does appear to mention VTR manufacture number data, a currently loaded tape ID number, and a serial tape number as tape map information, Ohno does not teach or suggest that the VTR manufacture number data comprises "an identification information of the manufacturer of a recording apparatus that recorded or modified the content of the recording medium different from the identification information prior to the recording or the modification," as recited in independent claim 4. Rather, Ohno checks whether the VTR manufacture number data as fetched from the tape coincides with the VTR manufacture number stored in the library memory 4 shown in FIG. 1. Unless coincidence is found, this control processing is terminated by regarding the tape as loaded is not the one of concern. If coincidence is found, in a step S12, the tape list information and the program list information **are read out** from the library memory 4 shown in FIG. 1. Ohno fails to teach or suggest modifying "the content of the recording medium different from the identification information prior to the modification," as recited in independent claim 4.

Ohno does not recognize "a recording apparatus for recording and/or editing content on a rewritable recording medium, comprising: a recording controller to record manufacturer information to support a manufacturer's specific function," as recited in independent claim 4. Rather, Ohno recognizes that the problem of erroneous recognition of a tape can satisfactorily be coped with by using as tape identification information the manufacture number (i.e., the VTR manufacture number) of the magnetic recording/reproducing apparatus that was used for recording programs on the tape. See column 2, lines 30-37. Accordingly, Ohno fails to anticipate independent claim 4 and related dependent claims.

Independent claim 7 recites "a device to record a manufacturer identification information of the recording apparatus on the recording medium in response to the recording apparatus modifying the content, wherein the manufacturer information comprises an identification information of the manufacturer of the recording apparatus that recorded or modified the content of the recording medium different from the identification information prior to the recording or the modification." Because the claimed features of independent claim 7 are somewhat related to the features of independent claim 4 argued above, the arguments presented above supporting the patentability of independent claim 4 are incorporated herein to support the patentability of independent claim 7 and related dependent claims.

Referring to independent claim 8, Ohno does not recognize "a reproducing apparatus for reproducing content, including audio, video, and/or information data, from a rewritable recording

medium, comprising: a reproducing controller to reproduce the content, formatted information for the content and manufacturer information to support a manufacturer's specific function, wherein the manufacturer information comprises an identification information of the manufacturer of a recording apparatus that recorded or modified the content of the recording medium different from the identification information prior to the recording or the modification," as recited in independent claim 8. Rather, Ohno recognizes that the problem of erroneous recognition of a tape can satisfactorily be coped with by using as tape identification information the manufacture number (i.e., the VTR manufacture number) of the magnetic recording/reproducing apparatus that was used for recording programs on the tape. See column 2, lines 30-37. Although Ohno does appear to mention VTR manufacture number data, a currently loaded tape ID number, and a serial tape number as tape map information, Ohno does teach or suggest that the VTR manufacture number data comprises "an identification information of the manufacturer of a recording apparatus that recorded or modified the content of the recording medium different from the identification information prior to the recording or the modification," as recited in independent claim 8.

Further, the Office Action refers to column 4, lines 29 to lines 65, of Ohno as teaching the claimed features of independent claim 3. In this portion of Ohno, in a play-back mode, tape map information recorded on a tape is read out to be decoded by a decoder circuit 6 to be subsequently supplied to the tape map controller 5 for checking whether the VTR manufacture number, the currently loaded tape ID number and the serial tape number **match** with those stored in the library memory 4, respectively. (Emphasis added). However, the controller 5 fails to provide "a reproducing controller to reproduce the content, formatted information for the content and manufacturer information to support a manufacturer's specific function," as recited in independent claim 8. Ohno refers to a memory 4 including three kinds of information, i.e., management information 26, tape list information 27 and a program list 28. Specifically, the VTR manufacture number in the management information 26 is used for determining whether a tape as loaded in the recording/reproducing apparatus is the tape processed by the same apparatus (i.e., whether both the recording and the play-back are effected by the same VTR). However, the management information 26 does not include "an identification information of the manufacturer of a recording apparatus that recorded or modified the content of the recording medium different from the identification information prior to the recording or the modification," as recited in independent claim 8. Accordingly, it is respectfully asserted that independent claim 8 and related dependent claim 9 are patentable.

Independent claim 10 of the present application recites "a device to check an identification information of a manufacturer and an identification information in the information recorded on the recording medium to determine a manufacturer that recorded or modified the content on the recording medium different from the identification information prior to the recording or the modification." The arguments presented above supporting the patentability of independent claim 8 are incorporated herein to support the patentability of independent claim 10.

Referring to independent claim 28, this claim recites "a recording and/or reproducing apparatus to record and/or reproduce content on a recording medium, comprising: a recorder to record on the recording medium a manufacturer identification information of the recording and/or reproducing apparatus indicating a manufacturer of the recording and/or reproducing apparatus as the one to record or modify the content of the recording medium different from the identification information prior to the recording or the modification; and a reproducer to read the manufacturer identification information, determine whether the content is effective based upon whether the read manufacturer identification information matches that of the recording and/or reproducing apparatus, and read the content if the content is effective." Similarly, independent claim 31 recites, "a reproducer to make a first determination of the manufacturer of the apparatus that recorded or modified the content based upon the read manufacturer identification information different from the manufacturer identification information prior to the recording or the modification, and make a second determination whether the optical pickup is to read the content based upon the first determination." The Office Action refers to FIG. 1, column 3, line 37, to column 4, line 28, of Ohno as disclosing the claimed features of independent claims 28 and 31. These portions of Ohno were previously discussed with respect to independent claims 4 and 8. Further, because independent claim 28 is somewhat related to independent claims 4 and 8, the arguments presented above supporting the patentability of independent claims 4 and 8 are incorporated herein to support the patentability of independent claims 28 and 31 and related dependent claims.

In view of the foregoing, Applicants respectfully assert that Ohno does not anticipate independent claims 4, 7, 8, 10, and 28 and related dependent claims. It is respectfully requested that the pending claims of the present application be allowed.

**REJECTION UNDER 35 U.S.C. § 103:**

In the Office Action, at page 23, claims 15 and 31-39 were rejected under 35 U.S.C. § 103 in view of Ohno and Yokota. The reasons for the rejection are set forth in the Office Action and therefore not repeated. The rejection is traversed and reconsideration is requested.

Because claim 15 is dependent on independent claim 7, Ohno must teach or suggest the claim limitations of independent claim 7 and the limitations of dependent claim 15 to satisfy an obviousness rejection under 35 U.S.C. § 103. Independent claim 7 was previously discussed and distinguished over Ohno, accordingly, the arguments presented above supporting the patentability of independent claim 7 and related dependent claims are incorporated herein.

Referring to independent claim 31, this claim recites “an optical pickup to read the manufacturer identification information; and a reproducer to make a first determination of the manufacturer of the apparatus that recorded or modified the content based upon the read manufacturer identification information different from the manufacturer identification information prior to the recording or the modification, and make a second determination whether the optical pickup is to read the content based upon the first determination.” The arguments presented above for claim 15 arguing the lack of motivation to modify the description of Ohno are incorporated herein. Further, because independent claim 31 is somewhat related to independent claims 8, 10, and 28, the arguments presented above supporting the patentability of independent claims 8, 10, and 28 are incorporated herein to support the patentability of independent claim 31 and related dependent claims.

Yokota describes a recording medium including a recording area, a first managing data area and a second managing area. See abstract. In the recording area are recorded only audio data, or an intermixture of audio data and video data. In the first managing area are recorded first managing data for controlling a recording or reproducing operation of audio data for the recording area when only the audio data are recorded in or reproduced from the recording area. In the second managing data area are recorded second managing data for controlling a recording or reproducing operation of the audio data for the recording area when both of audio data and video data are recorded in or reproduced from the recording area. However, Yokota is silent as to providing “a reproducer to make a first determination of the manufacturer of the apparatus that recorded or modified the content based upon the read manufacturer identification information different from the manufacturer identification information prior to the recording or the modification, and make a second determination whether the optical pickup is to read the content based upon the first determination,” as recited in independent claim 31.

Furthermore, Yokota does not teach or suggest making "a second determination whether the optical pickup is to read the content based upon the first determination," as recited in independent claim 31.

In view of the foregoing, Applicants respectfully assert that Ohno does not anticipate independent claims 15 and 31-39 and related dependent claims. It is respectfully requested that the pending claims of the present application be allowed.

CONCLUSION:

In accordance with the foregoing, it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot, and further, that all pending claims patentably distinguish over the prior art. Thus, there being no further outstanding objections or rejections, the application is submitted as being in condition for allowance, which action is earnestly solicited.

If the Examiner has any remaining issues to be addressed, it is believed that prosecution can be expedited by the Examiner contacting the undersigned attorney for a telephone interview to discuss resolution of such issues.

If there are any underpayments or overpayments of fees associated with the filing of this Amendment, please charge and/or credit the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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Date: September 1, 2002

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Please AMEND claims 4, 5, 7-10, 15, 16, 26-28, 31, 32, 34, and 39, and ADD claims 40-46. The remaining claims are reprinted, as a convenience to the Examiner, as they presently stand before the U.S. Patent and Trademark Office.

4. (ONCE AMENDED) A recording apparatus for recording and/or editing content[, including audio, video, and/or information data,] on a rewritable recording medium, comprising:
a recording controller to [produce content and formatted information for the content and] record manufacturer information to support a manufacturer's specific function, wherein the manufacturer information comprises an identification [code] information of the manufacturer of a recording apparatus that [last] recorded or modified the content of the recording medium different from the identification information prior to the recording or the modification.

5. (ONCE AMENDED) The recording apparatus of claim 4, wherein the manufacturer information further comprises an identification [code] information of a product that [last] modified the content of the recording medium.

6. (UNAMENDED) The recording apparatus of claim 4, wherein the manufacturer information has a maximum number of manufacturer information items, and if the number of manufacturer information items exceeds the maximum number of manufacturer information items, then the recording controller deletes an oldest one of the manufacturer information items.

7. (ONCE AMENDED) A recording apparatus to record content on a recording medium, comprising:

a device to record a manufacturer identification [code] information of the recording apparatus on the recording medium in response to the recording apparatus modifying the content, wherein the manufacturer information comprises an identification information of the manufacturer of the recording apparatus that recorded or modified the content of the recording medium different from the identification information prior to the recording or the modification.

8. (ONCE AMENDED) A reproducing apparatus for reproducing content, including

audio, video, and/or information data, from a rewritable recording medium, comprising:

a reproducing controller to reproduce the content, formatted information for the content and manufacturer information to support a manufacturer's specific function,

wherein the manufacturer information comprises an identification [code] information of the manufacturer of a recording apparatus that [last] recorded or modified the content of the recording medium different from the identification information prior to the recording or the modification.

9. (ONCE AMENDED) The reproducing apparatus of claim 8, wherein the manufacturer information further comprises a product identification [code] information of the recording apparatus that [last] modified the content of the recording medium.

10. (ONCE AMENDED) A reproducing apparatus to reproduce content and information on a recording medium, comprising:

a device to check an identification [code] information of a manufacturer and an identification [code] information in the information recorded on the recording medium to determine a manufacturer that [last] recorded or modified the content on the recording medium different from the identification information prior to the recording or the modification.

15. (ONCE AMENDED) The recording apparatus of claim 7, wherein the device comprises:

a coder to compression-code an A/V signal according to a predetermined compression scheme;

a signal processor to modulate the compression-coded A/V signal;

a radio frequency amplifier to convert the modulated signal into a radio frequency signal;

an optical pickup to record the radio frequency signal as the manufacturer identification [code] information on the recording medium;

a servo unit to control servo of the optical pickup based upon read signals from the radio frequency amplifier; and

a system controller to control the coder, the signal processor, the optical pickup, and the servo unit.

16. (ONCE AMENDED) The recording apparatus of claim 7, wherein the device

records a product information code indicating a product model of the recording apparatus that [last] modified the content of the recording medium on the recording medium.

17. (UNAMENDED) The recording apparatus of claim 16, wherein the device records an operation code indicating information on an operation performed by the recording apparatus other than reproduction on the content on the recording medium.

18. (UNAMENDED) The recording apparatus of claim 17, wherein the operation code information is compatible for a plurality of different manufacturers.

19. (UNAMENDED) The recording apparatus of claim 7, wherein the device records a manufacturer information item specific to the manufacturer, and a manufacturer code to indicate the manufacturer of the manufacturer information item.

20. (UNAMENDED) The recording apparatus of claim 16, wherein the device records a manufacturer information item specific to the manufacturer, a manufacturer code to indicate the manufacturer of the recording apparatus of the manufacturer information item, and a product code to indicate a product model of the recording apparatus of the manufacturer information item.

21. (UNAMENDED) The recording apparatus of claim 20, wherein the device records time information indicating a time when the manufacturer information item is recorded on the recording medium.

22. (UNAMENDED) The recording apparatus of claim 20, wherein the device records the manufacturer codes and the product codes at a beginning part of the manufacturer information item.

23. (UNAMENDED) The recording apparatus of claim 19, wherein the device records a search pointer indicating a starting address of the manufacturer information item.

24. (UNAMENDED) The recording apparatus of claim 19, wherein the device updates a number of total manufacturer information items recorded on the recording medium.

25. (UNAMENDED) The recording apparatus of claim 24, wherein the recording apparatus determines whether the number exceeds a predetermined limit, and if so, deletes an oldest manufacturer information item stored on the recording medium.

26. (ONCE AMENDED) The recording apparatus of claim 16, wherein the device records a last address of manufacturer information which includes the manufacturer identification [code] information and the product information code.

27. (ONCE AMENDED) the recording apparatus of claim 17, wherein the device records a last address of manufacturer information which includes the manufacturer identification [code] information, the product code, and the operation code.

28. (ONCE AMENDED) A recording and/or reproducing apparatus to record and/or reproduce content on a recording medium, comprising:

a recorder to record on the recording medium a manufacturer identification [code] information of the recording and/or reproducing apparatus indicating a manufacturer of the recording and/or reproducing apparatus as the [last] one to record or modify the content of the recording medium different from the identification information prior to the recording or the modification; and

a reproducer to read the manufacturer identification information, determine whether the content is effective based upon whether the read manufacturer identification information matches that of the recording and/or reproducing apparatus, and read the content if the content is effective.

29. (UNAMENDED) The recording and reproducing apparatus of claim 28, wherein if the reproducer determines that the read manufacturer identification information does not match that of the recording and reproducing apparatus, the reproducer reads the content of the recording medium to determine whether the content is effective.

30. (UNAMENDED) The recording apparatus of claim 4, wherein the manufacturer information further comprises a manufacturer information item specific for the manufacturer of the recording apparatus, wherein the recorder updates only the manufacturer information item

and does not update other manufacturer information items already recorded on the recording medium.

31. (ONCE AMENDED) A reproducing apparatus to reproduce content from a recording medium on which a manufacturer identification [code] information of a manufacturer of an apparatus that [last] modified the content of the recording medium, the reproducing apparatus comprising:

an optical pickup to read the manufacturer identification [code] information; and
a reproducer to make a first determination of the manufacturer of the apparatus that [last] recorded or modified the content based upon the read manufacturer identification [code] information different from the manufacturer identification information prior to the recording or the modification, and make a second determination whether the optical pickup is to read the content based upon the first determination.

32. (ONCE AMENDED) The reproducing apparatus of claim 31, wherein the reproducer comprises:

a radio frequency amplifier to convert an optical signal of the read manufacturer identification [code] information and the read content to an electrical signal and extracts a servo signal from the optical signal;

a signal processor to perform error correction coding and demodulate the optical signal;
a decoder to decode the error corrected demodulated signal;
a servo unit to control servo of the optical pickup based upon the servo signal; and
a system controller to control the radio frequency amplifier, the signal processor, the decoder, and the servo unit.

33. (UNAMENDED) The reproducing apparatus of claim 31, wherein the recording medium has a product information code indicating a product model of the apparatus that [last] modified the content of the recording medium on the recording medium, the optical pickup reads the product model, and the reproducer determines whether to read the content based upon the read product model.

34. (ONCE AMENDED) The reproducing apparatus of claim 31, wherein the recording medium has an operation code indicating information on an operation performed by

the recording apparatus that [last] modified the content of the recording medium, the optical pickup reads the operation code and the reproducer determines how to modify the content based upon the read operation code.

35. (UNAMENDED) The reproducing apparatus of claim 33, wherein the recording medium has a manufacturer information item specific to the manufacturer, and a manufacturer code to indicate the manufacturer of the manufacturer information item, wherein the optical pickup reads the manufacturer code and the reproducer determines whether to read the manufacturer information item if the manufacturer code matches a code relating to the manufacturer of the reproducing apparatus.

36. (UNAMENDED) The reproducing apparatus of claim 33, wherein the recording medium has a manufacturer information item specific to the manufacturer, a manufacturer code to indicate the manufacturer of the recording apparatus of the manufacturer information item, and a product code to indicate a product model of the recording apparatus of the manufacturer information item, wherein the optical pickup reads the manufacturer code and the product code, and the reproducer determines whether to read the manufacturer information item if the manufacturer code matches a code relating to the manufacturer of the reproducing apparatus and the product code matches a code relating to the product model of the reproducing apparatus.

37. (UNAMENDED) The reproducing apparatus of claim 36, wherein the recording medium has time information indicating a time when the manufacturer information item is recorded on the recording medium, the optical pickup reads the time information and the reproducer processes the read time information.

38. (UNAMENDED) The reproducing apparatus of claim 35, wherein the recording medium has a search pointer indicating a starting address of the manufacturer information item, the optical pickup reads the search pointer and then reads the manufacturer information item at the starting address thereof.

39. (ONCE AMENDED) The reproducing apparatus of claim 31, wherein the reproducer determines whether the read manufacturer identification [code] information matches

a code of a current reproducing apparatus relating to a manufacturer of the current reproducing apparatus, controls the optical pickup to read the content if there is a match for reproduction of the content, controls the optical pickup to read the content if there is not the match for analyzing the content, and reproduces the content if there is the match or if the analysis indicates the content is reproducible by the current reproducing apparatus.

40. (NEW) The recording apparatus of claim 4, wherein the identification information of the manufacturer corresponds to the manufacturer of the recording apparatus that last modified the content of the recording medium.

41. (NEW) The recording apparatus of claim 7, wherein the identification information of the manufacturer corresponds to the manufacturer of the recording apparatus that last modified the content of the recording medium.

42. (NEW) The reproducing apparatus of claim 8, wherein the identification information of the manufacturer corresponds to the manufacturer of the recording apparatus that last modified the content of the recording medium.

43. (NEW) The reproducing apparatus of claim 10, wherein the identification information of the manufacturer corresponds to the manufacturer of the recording apparatus that last modified the content of the recording medium.

44. (NEW) The recording and reproducing apparatus of claim 28, wherein the manufacturer identification information corresponds to the manufacturer of the recording apparatus that last modified the content of the recording medium.

45. (NEW) The reproducing apparatus of claim 31, wherein the manufacturer identification information corresponds to the manufacturer of the recording apparatus that last modified the content of the recording medium.

46. (NEW) The recording apparatus of claim 4, wherein when the identification information of the recording apparatus which modified the recording medium is the same as an identification information for the current recording apparatus and the editing is complete, the

manufacturer information item is updated by analyzing the content of the manufacturer information item corresponding to the modified content to determine whether the manufacturer information item for the manufacturer is effective to perform the recording, the modification, and/or reproduction.